

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended): An implantable medical prosthesis for maintaining lumen patency comprising a substantially cylindrical hollow body having a distal end and a proximal end and defining a longitudinal axis therebetween, the body being formed from a self-supporting non-metallic graft material and at least a portion of the graft material having a profile comprising a geometric pattern including plurality of pleats, disposed in a Z pattern in ~~both~~ at least one of a radial and longitudinal direction, configured to provide radial support in a tubular organ, the plurality of pleats being configured to come together as a series of regular folds, a distal anchor having a substantially diamond shaped lattice structure formed from a self-expanding metallic material and a proximal anchor having a substantially diamond shaped lattice structure formed from a self-expanding metallic material, the distal and proximal anchors being affixed via sutures to the ends of the hollow body and having minimal overlap with the hollow body.

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Cancelled)

6. (Original): The prosthesis of claim 1 wherein at least a section of the self-supporting non-metallic graft material is woven.

7. (Original): The prosthesis of claim 1 wherein at least a section of the self-supporting non-metallic graft material is non-woven.

8. (Original): The prosthesis of claim 1 wherein at least a section of the self-supporting non-metallic graft material is knitted.

9. (Original): The prosthesis of claim 1 wherein the self-supporting non-metallic graft material includes polyester.

10. (Original): The prosthesis of claim 1 wherein the self-supporting non-metallic graft material includes polypropylene.

11. (Original): The prosthesis of claim 1 wherein the self-supporting non-metallic graft material includes polyethylene.

12. (Cancelled)

13. (Withdrawn): The prosthesis of claim 12 wherein the pleats are disposed in a sinusoidal pattern.

14. (Withdrawn): The prosthesis of claim 12 wherein the pleats are disposed in an elliptical pattern.

15. (Withdrawn): The prosthesis of claim 12 wherein the pleats are disposed in an helical pattern.

16. (Withdrawn): The prosthesis of claim 12 wherein the pleats are disposed in an oblique pattern.

17. (Cancelled)